

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 15:05:26 ON 13 SEP 2002

L1 57 S TRANSGENIC AND (MOLLUSK OR MOLLUSC)
L2 4 S L1 AND GFP
L3 486 S GFP AND LACZ
L4 192 S L3 AND TRANSGEN?
L5 6 S L4 AND VITAL (A) MARKER
L6 2 DUP REM L5 (4 DUPLICATES REMOVED)

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(FILE 'HOME' ENTERED AT 15:05:10 ON 13 SEP 2002)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 15:05:26 ON 13 SEP 2002

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L6 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1

AB In recent years, considerable progress has been made in genetic engineering of various plant species, both agronomically important crops as well as model plants. The bases of this progress were, in addition to efficient transformation methods, the design of appropriate signals regulating **transgene** expression and the use of selection marker or reporter genes. In most cases, a gene of interest is introduced into plants in association with a selectable marker gene (nptII, hpt, acc3, aadA, bar, pat). Recovery of a **transgenic** plant is, therefore, facilitated by selection of putative transformants on a medium containing a selection agent, such as antibiotic (nptII, hpt, acc3, aadA), antimetabolite (dhfr), herbicide (bar, pat), etc. On the other hand, use of reporter genes (cat, lacZ, uidA, luc, **gfp**) allows not only to distinguish transformed and non-transformed plants, but first of all to study regulation of different cellular processes. In particular, by employing **vital markers** (Luc, **GFP**) gene expression, protein localization and intracellular protein traffic can be now observed *in situ*, without the need of destroying plant.

TI Plant selectable markers and reporter genes.

L6 ANSWER 2 OF 2 MEDLINE DUPLICATE 2

AB The ability to use a vital cell marker to study mouse embryogenesis will open new avenues of experimental research. Recently, the use of **transgenic** mice, containing multiple copies of the jellyfish gene encoding the green fluorescent protein (**GFP**), has begun to realize this potential. Here, we show that the fluorescent signals produced by single-copy, targeted **GFP** in-frame fusions with two different murine Hox genes, Hoxal and Hoxc13, are readily detectable by using confocal microscopy. Since Hoxal is expressed early and Hoxc13 is expressed late in mouse embryogenesis, this study shows that single-copy **GFP** gene fusions can be used through most of mouse embryogenesis. Previously, targeted lacZ gene fusions have been very useful for analyzing mouse mutants. Use of **GFP** gene fusions extends the benefits of targeted lacZ gene fusions by providing the additional utility of a **vital marker**. Our analysis of the Hoxc13(GFPneo) embryos reveals **GFP** expression in each of the sites expected from analysis of Hoxc13(lacZneo) embryos. Similarly, Hoxal(GFPneo) expression was detected in all of the sites predicted from RNA *in situ* analysis. **GFP** expression in the foregut pocket of Hoxal(GFPneo) embryos suggests a role for Hoxal in foregut-mediated differentiation of the cardiogenic mesoderm.

TI Detection of targeted **GFP**-Hox gene fusions during mouse embryogenesis.

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L Number	Hits	Search Text	DB	Time stamp
1	0	("mollusk or mollusc").PN.	USPAT; US-PGPUB	2002/09/13 13:50
2	0	("mollusk or mollusc").PN.	USPAT; US-PGPUB;	2002/09/13 13:50
3	726	mollusk or mollusc	EPO USPAT; US-PGPUB;	2002/09/13 13:50
4	36	(mollusk or mollusc) and transgenic	EPO USPAT; US-PGPUB;	2002/09/13 13:53
5	829700	transgenic w (mollusc or mollusk)	EPO USPAT; US-PGPUB;	2002/09/13 13:53
6	3	transgenic with (mollusc or mollusk)	EPO USPAT; US-PGPUB;	2002/09/13 13:54